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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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05/05/2005

Josef Beck

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04/07/2008

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EXAMINER

KASTURE, DNYANESH G

ART UNIT

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4147

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,178	Applicant(s) BECK, JOSEF	
	Examiner DNYANESH KASTURE	Art Unit 4147	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12 and 14 is/are rejected.
- 7) ☒ Claim(s) 5 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05 May 05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spherical shape of the sealing surrounding area of the control openings as claimed in claims 7 and 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 1 is objected to because of the following informalities: The word “radically” should be “radially”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Tovey (US Patent 4,757,743 A).

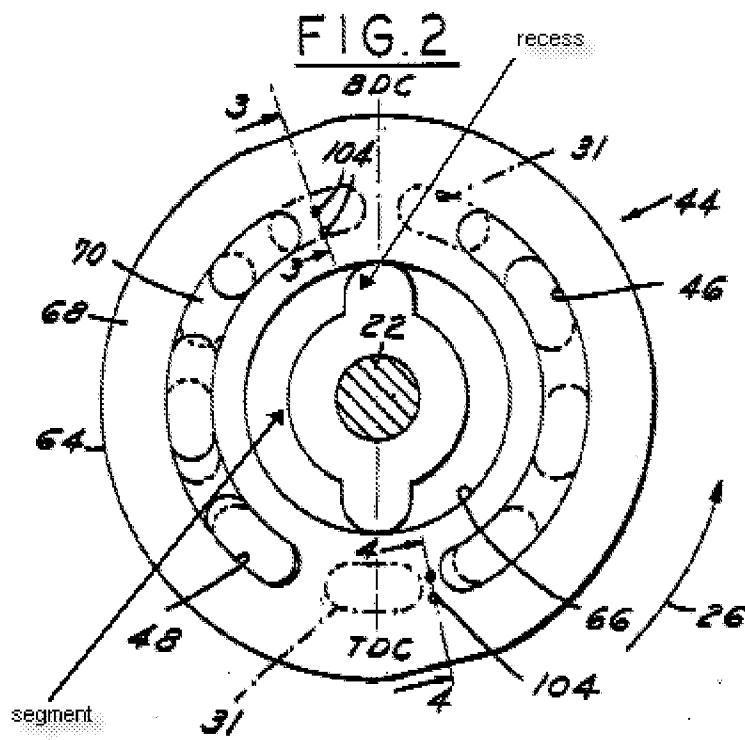
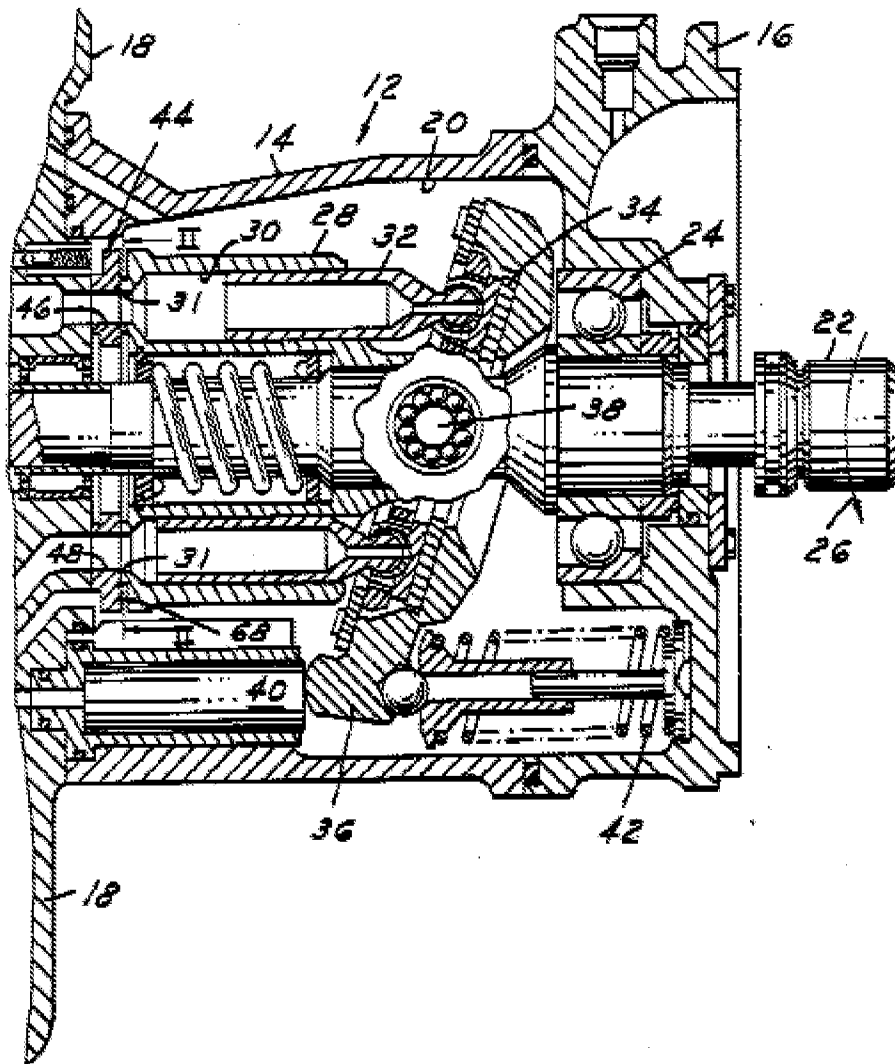


FIG. 1B



5. In Re claim 1, with reference to figures 1B and 2 depicted above, Tovey discloses a control plate (44) for an axial piston machine (12) having at least two control openings (46), (48) by means of which cylinder bores (30) of a cylinder drum (28) rotatably mounted (on shaft (22)) in housing (14) are alternately connected, on rotation

of the cylinder drum (28), to a high pressure connection (48) and a low pressure connection (46) a through opening (66) formed in the control plate wherein:

- the radially inner edge (depicted by label 66 pointer) of the control plate (44) is designed as a centering surface around shaft (22)
- the centering surface comprising plurality (2) of partial surfaces formed on segments (depicted above in Figure 2) of the inner edge of the control plate (44) which extend radially inward into the through opening (66) as depicted in Figure 2, and are separated by recesses as depicted

6. In Re claim 3, Figure 2 of Tovey depicts the thickness of the segments is substantially the same as the depth of the recesses, and they also have a finite width. The recess transforms into a gap between the shaft (22) and the radially inner edge (depicted by label 66 pointer) after assembly of the machine.

7. In Re claim 4 and 12, Figure 1B of Tovey depicts a radial edge (lip that is pointed to by the arrow associated with label (44)). The lip surrounds the plate around the outer edge and therefore is connected to the high-pressure connection and the low-pressure connection in the region of all the control openings.

8. In Re claim 6, Figure 2 of Tovey depicts the thickness of the segment is less than the thickness of majority of the plate.

9. In Re claim 8, with reference to figures 1B and 2 depicted above, Tovey discloses an axial piston machine (12) having a cylinder drum (28) which is rotatably mounted in a housing (14) and in which are made cylinder bores (30) in which pistons (32) are axially displaceably arranged, the cylinder bores (30) having openings (31) towards and end side of the cylinder drum (28) are alternately in connection with a high-pressure connection (48) and a low-pressure connection (46) via at least two control openings (46), (48) of a control plate (44), the control plate (44) having through opening (66) wherein:

- the radially inner edge (depicted by label 66 pointer) of the control plate (44) is designed as a centering surface around shaft (22)
- the centering surface comprising plurality (2) of partial surfaces formed on segments (depicted above in Figure 2) of the inner edge of the control plate (44) which extend radially inward into the through opening (66) as depicted in Figure 2, and are separated by recesses as depicted

10. In Re claim 10, Tovey discloses a cylinder drum (28) is mounted on a shaft (22), the shaft (22) being mounted in the housing (14) on the side of the control plate (44) by virtue of screw fastening (depicted in Figure 1A), and the control plate (44) is concentric with the shaft (22) which in turn is concentric with bearing race of roller bearing (24). The centering surface (segment) surrounds the shaft (22) and is also concentric.

11. In Re claim 11, the radial extend of the recess is greater than the radial extend of the segment as depicted in Figure 2 of Tovey.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2, 7, 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tovey (US Patent 4,757,743 A).

14. In Re claim 2, Tovey as applied to claim 1 discloses all the claimed limitations except for the centering surface is composed of three partial surfaces. Tovey only discloses 2 segments each with a partial surface. It would have been an obvious matter of design choice to have three or more segments on the radially inner edge of the control plate, each with a partial surface, since applicant has not disclosed that having three partial surfaces solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with two partial surfaces.

15. In Re claim 7, Tovey as applied to claim 6 discloses all the claimed limitations except for the sealing surrounding area of the control openings is spherically shaped. It would have been an obvious matter of design choice to have a spherically shaped sealing surrounding area, since applicant has not disclosed that having a spherically shaped sealing surrounding area as opposed to any other shape for the surrounding area solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well without the claimed spherical shape.

16. In Re claim 9, Tovey as applied to claim 8 discloses all the claimed limitations except for the centering surface being composed of three partial surfaces. Tovey only discloses 2 segments each with a partial surface. It would have been an obvious matter of design choice to have three or more segments on the radially inner edge of the control plate, each with a partial surface, since applicant has not disclosed that having three partial surfaces solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with two partial surfaces.

17. In Re claim 14, Tovey as applied to claim 8 discloses all the claimed limitations except for the cylinder drum end side and the sealing surrounding area being spherically shaped. It would have been an obvious matter of design choice to have a spherically shaped sealing surrounding area and cylinder drum end side, since applicant has not disclosed that having a spherically shaped sealing surrounding area and cylinder drum end side as opposed to any other shape for the surrounding area and

end side solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well without the claimed spherical shape.

Allowable Subject Matter

18. Claims 5 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ochiai et al (US Patent 5,807,080 A) discloses one recess in a segment on a plate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DNYANESH KASTURE whose telephone number is (571)270-3928. The examiner can normally be reached on Mon-Fri, 9:00 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Nguyen can be reached on (571) 272-4491. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dnyanesh Kasture
Examiner
Art Unit 4147

DGK

/Ninh H. Nguyen/
Primary Examiner, Art Unit 3745
04/02/08